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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,479	02/05/2004	Fredrick R. Driscoll	6818-64	4983

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EXAMINER

VASUDEVA, AJAY

ART UNIT	PAPER NUMBER
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3617

DATE MAILED: 09/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/772,479

Applicant(s)

DRISCOLL ET AL.

Examiner

Ajay Vasudeva

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 12-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 June 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election **without traverse** of invention of **Group I** (claims 1-11) in the reply filed on 8/25/2005 is acknowledged. Claims 12-25 are therefore withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected Groups of Inventions, there being no allowable generic or linking claim.

Specification

2. On page 1 (line 8), after "Office of", change "**Navel**" to – **Naval** --.

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

- The mooring line including at least one conductor, as set forth in claim 6.

Note: No new matter should be entered.

Drawings

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the following must be shown or the feature(s) canceled from the claim(s).

- A cylinder containing an anchor, mooring module and a buoy, as set forth in claim 2.
- The mooring line including at least one conductor, as set forth in claim 6.

Note: No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should

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include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

5. Claims 1-11 are objected to because of the following informalities:

A use of slash-type of punctuation mark (/) in the expression "air brake/anchor" is objected to because it is an informal expression and may be confused for indicating an alternative (e.g., air-brake or anchor) rather than a combination (air-brake and anchor). It is recommended that "air brake/anchor" be changed to "air brake and anchor" or an equivalent. Appropriate correction is requested.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claim 2 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

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In claim 2, applicants claim the anchor, the mooring module and the buoy as being deployed from the cylinder (emphasis added). While the Specification does generally refer to a container with an anchor, a mooring module and a buoy, applicants have provided no description of a mechanism that would effect their deployment from the cylinder. As such, the disclosure of the invention would not enable one skilled in the art to make and/or use the invention.

8. Claim 6 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In claim 6, applicants claim at least one conductor included in the mooring line. However, the original Specification discloses no such arrangement.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-5 and 7-11 are rejected under 35 U.S.C. 102(a) as being anticipated by the IEEE's 2002 publication by Driscoll, Venezia, Curic and Pantelakis, cited in applicant's IDS.

It is first noted that the authors of the IEEE's 2002 publication cited in applicant's IDS are not the same as the inventors of the instant invention, and therefore, the two are considered to be different inventive entities.

The IEEE publication (*see pages 435-436; and figures 2-6*) discloses an autonomous mooring device comprising a combination of an air brake and anchor. The combination has a parachute attached to a plurality of mooring arms, a mooring line contained within a mooring module, and a floatation buoy attached to an end of the mooring line (page 435, col. 1, ¶3).

Each of the mooring arms comprises a plurality of linked arm segments, the mooring arms being foldable at joints of the linked arm segments to enable the air brake/anchor to be folded into a compact, stowed position. Springs are connected to adjacently positioned linked arm segments to facilitate deploying the air brake/anchor from the compact, stowed position to an expanded, deployed position (page 435, col. 2). The mooring line module comprises a mooring line spool, a module housing, a line feed disk, and a line locking mechanism, wherein the mooring line is fed out from the mooring line spool through the line feed disk. The mooring line module further comprises an electronics system with a magnet and a hall sensor; and a pressure sensor to measure the depth of the mooring line module within a fluid.

11. Claims 1, 5 and 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by the Halberg et al. (US 3,291,092 A).

Halberg et al. shows an autonomous mooring device comprising a combination of a brake and anchor. The combination has a parachute [97] (*see fig. 8*) attached to a plurality of

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mooring arms [24], a mooring module [17], and a floatation buoy [14] attached to an end of the mooring line [18]. Applicant may note that no patentable weight is given to the adjective "air" in the phrase "air brake". It may additionally be noted that if the device of Halberg et al. is dropped from the sky, the mooring arms would operate as air brakes, also commonly known as parachutes.

Re claim 7, the parachute is attached to at least an inner end of the mooring arms.

Re claims 8 and 9, the mooring line module comprises a mooring line spool [43], a module housing [26], and a line feed disk [28, 31], wherein the mooring line is fed out from the mooring line spool through the line feed disk. The attachment means of the line [18] to the module, considered inherent in the design of the device to prevent a detachment, is considered to be equivalent of a line locking mechanism.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ajay Vasudeva whose telephone number is (571) 272-6689. The examiner can normally be reached on Monday-Friday 12:00 -- 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, S. Joe Morano can be reached on (571) 272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ajay Vasudeva
Examiner
Art Unit 3617

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9/28/05
AJAY VASUDEVA
PATENT EXAMINER